

The Impact of Resiliency Based Teaching Strategies on Students with Disabilities

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Abstract

The purpose of this study was to determine if resiliency-based teaching strategies increase resiliency in participants with disabilities by having student take a resiliency survey after resiliency interventions were implemented. Additionally, the researcher wanted to see how students with disabilities growth compared to students without disabilities. Two research questions guided this study: Does the use of resiliency-based teaching strategies affect resiliency in participants with disabilities? And does the use of resiliency-based teaching strategies impact participants differently depending on whether they have a disability or not? It was hypothesized that implementing resiliency-based teaching strategies will improve resiliency in participants with documented disabilities. It was also hypothesized that when resiliency-based teaching strategies are implemented, participants with disabilities will show equal if not more growth than participants without disabilities. Twenty-six tenth and eleventh grade students from four of the researcher's co-taught English II and III basic classes participated in the six-week study with both participants with and without disabilities receiving the intervention and testing. The researcher used various forms of research-based resiliency teaching strategies as the intervention but used one instrument throughout the six-week period. The Connor-Davidson RISC-25 resiliency survey was used to document participant's resiliency throughout this study. The participants with disabilities showed an average of 14.1-point increase in their pretest and posttest scores. In addition, participants without disabilities showed an average of 11.2-point increase in scores. This shows that students with disabilities have an average of 2.9-point higher resiliency than participants without disabilities.

Keywords: resiliency, grit, disabilities, teaching strategies

The Impact of Resiliency Based Teaching Strategies on Students with Disabilities

It is well known that there are certain skills students need to master in order to become more successful in life. Many people believe these skills are academic based, such as understanding quadratic formulas or writing a seven-page argumentative paper. However, certain non-cognitive skills have also been shown to be a huge factor in the success of student achievement. One of the major noncognitive skills proven to show positive impacts in students is resiliency, or also referred to as grit. Grit has been synonymous with high levels of academic performance, educational achievement, graduation rates, and academic behavior (Goodwin & Miller, 2013; Jiang et al., 2020). There are many factors that can predict a student's resiliency. Some of these factors are outside the school's control, such as family dynamic, relationships, and a stable home (Edwards et al., 2016). However, there are also strategies that can be taught within the classroom which are called resiliency-based teaching strategies. Some research proven strategies include learning stories, reading resilient adolescent literature, peer tutoring, positive relationships, and self-evaluation (Polirstok, 2017).

However, while these teaching strategies have been proven to work on students of all ages, there is little research proving that they work for students who have disabilities. Students with disabilities face more challenges in school and have less success in their academic outcomes than students without disabilities (Zheng et al., 2012). Some challenges that students face in the classroom because of their disability are strained relationships with teachers and peers, having low self-confidence when it comes to their intelligence, emotional and behavioral adversities, feeling of being excluded, experiencing more conflict within school, and feeling heightened anxiety or stress (Arman, 2002). Due to these added struggles students with disabilities need the skill of resiliency to get through life even more than their peers without disabilities.

Therefore, the purpose of this study was to determine if participants with disabilities benefit from resiliency-based teaching strategies by implementing these strategies and testing the participants resiliency weekly to see growth. In addition, this study was also used to determine if participants with disabilities growth was greater than, less than, or equal to participants without disabilities. For the purpose of this study, participants were involved in different intervention teaching strategies proven to increase resiliency but given the same instrument (RISC-25) to test for growth weekly.

This study was guided by two research questions:

1. Does the use of resiliency-based teaching strategies affect resiliency in students with disabilities?
2. Does the use of resiliency-based teaching strategies impact students differently depending on whether they have a disability or not?

The study hypothesized that implementing resiliency-based teaching strategies will improve resiliency in students with documented disabilities. The study also hypothesized that when resiliency-based teaching strategies are implemented, students with disabilities will show equal if not more growth than students without disabilities. In the following literature review, the researcher discussed the importance of grit and resiliency in adolescent students. In addition, the research also discussed the predictors of resiliency and what factors can boost or hinder student's resiliency levels. The researcher also explained and described different resiliency-based teaching strategies to improve student's grit. Finally, in the literature review it explained how students with disabilities face more challenges because of their impairment and the lack of research on resiliency within this demographic.

What is Grit and Resiliency?

High school is a time of change and growth. However, this time can be stressful on students due to the unknown of life as an adult. There are many challenges that students face while going through high school and having the skill to be resilient is what helps students succeed in the future. Students need to find purpose in their current and future lives to get through the obstacles they face throughout high school. “Grit was beneficial to learners and was found to be associated with academic performance, educational attainment, academic adjustment, and graduation rates” (Jiang et al., 2021, p.1). Grit is defined as “perseverance and passion for long-term goals” (Bashant, 2014, p.14), while resiliency is defined as “the ability to appraise situations without distorting them, and thinking about changes that are possible in your life” (Bashant, 2014, p. 14). Students in the high school setting need to gain the skills of grit and resiliency in order to become more successful in their futures and ultimately become lifelong learners in society.

Why is Grit and Resiliency So Important?

It is well known that adolescence is a time of change and exploration. Most teenagers focus less on the importance of family and more on peer acceptance. According to famous psychologist Erik Erickson (1968), “Adolescence is a time for identity formation or individuation away from family of origin while moving toward increased conformity with peers” (p. 1). Erickson believed that teenagers want to establish themselves as independent from their parents and puts more emphasis on being included and accepted by peers. Students with low peer acceptance struggle with academic challenges, behavior issues, and low self-esteem (Tamm et al., 2014). Due to this idea, teenagers go through a stage where being smart is deemed “uncool.” In certain racial and minority groups being smart is “selling out” to the dominant racial

group (Polirstok, 2017). Therefore, students who appear smart risk alienation from the racial or ethnic group to which they belong (Polirstok, 2017). With this normal teenage mindset, high school student's resiliency starts to decrease.

Researchers have started to identify that simply setting a higher bar for student's academically is not enough, and students need the ability to know they can achieve goals (Goodwin & Miller, 2013). It has been shown that every nine seconds a student drops out of high school, ultimately leading to the United States graduation rate at only 69.9% (Hupfeld, 2010). Many students at risk of dropping out of school lack the skills in self-determination and resiliency. Resiliency, or also commonly referred to as "grit", is the ability to persist overtime. When someone is faced with an obstacle that is seemingly too difficult, resiliency is needed in order to have the ability to persevere. Resiliency is comprised of four traits: goal-directedness, motivation, self-control, and positive mindset (Duckworth, 2013). Many times, in classrooms, you hear students complain about how work is "too hard" or "I can't do this". According to Locke and Lantham (2006), "twenty-five years of research has shown that giving students challenging goals encourages greater effort and persistence than providing moderate 'do-your-best' goals or no goals at all" (p. 266). Students need to perceive that the goal they have set up for themselves is obtainable and they can accomplish the given goal.

However, this might not work in a classroom with 30 percent of the students that are considered special education students. There has not been as much research conducted on resiliency in special education than students with no disabilities. According to Cortiella and Horowitz (2014), students with learning disabilities have poorer transitional outcomes when compared to same age peers without disabilities. Students who have learning disabilities face more challenges when it comes to academic achievement and transitional outcomes than students

without disabilities (Zheng et al., 2012). Some challenges that students with disabilities face that impact their academic achievement is strained relationships with peers and teachers and feelings of insecurity about their disability in general education classrooms. According to Arman (2002), these strained relationships with teachers and peers can stem from a multitude of sources including low academic self-confidence, emotional or behavioral difficulties that impede on academic success, being excluded from general education courses due to their disability, experiences increased conflict at school because of their disability, and having anxiety and stress at school because of their challenges. Students with disabilities face greater challenges in the school setting than their peer counterparts. Resiliency has been shown to help mend these negative factors on student's lives. Resilient students are shown to overcome life's challenges, create stable relationships, and have healthier personalities (Arman, 2002). However, there has not been enough research to support students with disabilities benefit from resiliency skills equally or more than students without disabilities.

Predictors of Resiliency

One predictor of resiliency is self-determination and the ability to get back up when faced with a challenge. "Self-determination and self-concept have been shown to be correlated with positive school engagement and adult outcomes" (Zheng et al., 2012). There are four areas that make up self-determination which include autonomous, self-regulated, psychologically empowered, and self-realizing (Tuckwiller et al., 2019). According to Shogren et al. (2015), students who have disabilities with higher self-determination are more likely to go on to college, gain employment, and live independently versus students with lower self-determination. Therefore, the more self-determination a student has the better their transition outcomes. In the past, teachers would focus on fixing the student's areas of weakness to help

them with their transition. People with disabilities have, in society, not been synonymous with success and having strengths. “Orienting special education toward the strengths-based frameworks that anchor the field of positive psychology is a significant paradigm shift” (Wehmeyer, 2013, p. 3). Students with learning disabilities that display high levels of self-determination are more likely to achieve greater academic achievements and postsecondary success (Zheng et al., 2012). Instead of focusing on special education student’s weaknesses, we need to instill self-determination to promote better transition outcomes in the future.

Most researchers pair resiliency with self-determination, motivation, mindset, and optimism. According to a study done by Tuckwiller et al., (2019), each component has a positive correlation to the other. If a student has increased their skills in one of the skill areas than they will improve in other areas as well. One of the highest correlations was between self-determination and mindset. Research suggests that the more positive of a mindset or outlook of one’s future, the better self-determination that student will obtain (Tuckwiller et al., 2019). In addition, each component is malleable, meaning that if you are weak in one of the areas, it is not permanent. “Optimism and grit are thought to be malleable to some extent and can be shaped, conveniently, by promoting growth mindset” (Donahue, 2015, p. 1).

How to Improve Grit and Resiliency

While there are many factors that can lead a student to have high or low resiliency, there are only so many factors that teachers and schools can control. In the end, the goal is for schools to try to limit the factors that may attribute to lower resiliency and emphasize and nourish the factors that improve resiliency. Some resiliency-based teaching strategies that have been proven to promote resiliency are learning stories, adolescent literature, peer tutoring, positive relationships, and self-evaluation.

Learning Stories

Because each area can be improved, different interventions can play a key role improving resiliency. One of the first interventions to be implemented is learning stories. Learning stories develop resiliency by using stories that capture the narratives of students who empowered learners and who wants better outcomes in life (Pride, 2014). The story's main themes that were most effective were belonging and mindset, especially when told from an older student's point of view (Duckworth et al. 2007). For example, when faced with a tough assignment, hearing stories from upperclassmen who completed the assignment make the task seem more feasible. This intervention implemented by the researcher will allow students to change their perspective on academics and how they can be successful.

Adolescent Literature

Adolescent literature will be easily incorporated into an English class because this strategy suggests using characters in a story to help students build resiliency. The character needs to be relatable to the student and classroom and show a message of perseverance. One of the best form of books from adolescent literature is biographies because they are true event. "Biographies of individuals who have overcome significant challenges may be very impactful for young adolescents, especially if the highlighted individual is someone who comes from similar circumstances and backgrounds" (Polirstok, 2017, p. 3). This demonstrates to the students that their mindset and abilities can be changed based on the work that they put in, similar to the character in the story.

Peer Tutoring

Peer-tutoring is a skill that many teachers have used in the classroom but may not have realized the positive effects. This is because if done incorrectly, the results will not

show improvement in resiliency, self-determination, mindset, and optimism. For 30 years peer tutoring has been used to increase academic and social/behavioral performance (Polirstok, 2017). If a student is lacking self-confidence or has a fixed mindset, peer-tutoring can be a helpful intervention. Having that student become the tutor in the group demonstrates their academic abilities and boosts confidence. According to Polirstok (2017), “the act of serving as a tutor can result in enhancement of one’s social status with peers...and learn the rules of persistence to task completion” (p. 5). Peer-tutoring can assist students with a fixed mindset to change their outlook on life.

Positive Relationships

Positive relationships have been seen to help improve student resiliency in adolescents. Researchers have found a high correlation between resiliency in students and a feeling of connectedness at school (Hupfeld, 2010). In order to gain resiliency at school, students need the support, guidance, and appreciation of their peers and teachers. “The quality of students’ relationships with teachers and peers is a fundamental substrate for the development of academic engagement and achievement” (Furrer et al., 2014, p. 101). Both peer and teacher relationships can help benefit students’ resiliency by giving them a sense of autonomy, relatedness and competency (Furrer et al., 2014). When it comes to teachers, it has become harder and harder to form relationships with students due to high risk-test score pressures put on teachers, less prep time, and a shift on student academic growth. The pressure to meet standards, goals, and growth is stress put on the teacher and therefore inadvertently leads to less relationship building. However, when relationships do form, students feel welcomed in the classroom, feel like they are competent to succeed with high standard goals, and have more motivation to work hard for teachers that they love and respect (Furrer et al., 2014). Teachers can also model what it is like to

be resilient by sharing their challenges with the students and prove that people are capable of overcoming adversity (Hupfeld, 2010).

In addition, peer relationships are also a predictor of student resiliency. When a classroom is set up to have good peer relationships, where students listen, empathize with each other, and respect each other student feel a sense of belonging and confidence (Furrer et al., 2014). Structure is then seen in peer relationships as well when students give each other feedback and support (Furrer et al., 2014). Overall, students who form positive relationships with both teachers and peers show high resiliency and academic success than students that do not.

Self-evaluation

The last intervention to be implemented is self-evaluation, where students rate themselves on performance. This strategy forces students to recognize their strengths and weaknesses and ultimately change their mindset about resiliency and ability. Self-evaluation teaches students to identify the criteria that will be used in the evaluation and the perspective of the teacher and themselves on their skills (Polirstok, 1987). Majority of students rate themselves poorly and when compared to the teacher's perspective, the student realizes that they did better than they once thought.

Critique on Grit

While grit and resiliency have been shown through research to help students succeed in school, recent articles have come out being against the idea of grit. Crede et al. (2017) states that grit is of less importance than originally thought and it is very similar to the idea of conscientiousness. Although, conscientiousness is considered to be something that cannot change whereas grit is. In addition, Crede et al. (2017) also suggest that research done on grit has not been as transparent in the effective size of people researched on grit, attacking Duckworth who is

the original leader of the idea of grit. While grit has been a topic of controversy within the past couple of years, there is still research that shows the effectiveness of the idea on student's outcomes.

Summary

According to Sarah Sparks (2014), "U.S. schools are on an upward trajectory to meet a national goal of 90 percent high school graduation by 2020" (p. 1). Fast forward to the present, and schools still seem to struggle with improving graduation, grades, transitional outcomes, and discipline. Students who show increased resiliency, self-determination, optimism, and mindset are significantly higher at graduating, getting a job, and living independently (Shogren, 2015). It is apparent that resiliency and grit is correlated with academic success for students without disabilities, however it has lacked research in how this non-cognitive trait impacts students with documented disabilities. In this research, students with and without disabilities will be evaluated on their resiliency before, during, and after implementing resiliency-based teaching strategies.

Methods

The research conducted was a quantitative study approach that used a quasi-experimental design. The researcher implemented intervention strategies and collected data for a total of six weeks from 10th and 11th grade participants in the researcher's classroom during the Fall semester of 2021. The following information details the participants, setting, data sources, research materials, and procedures used in collecting data.

Participants

Participants in this study consisted of 26 tenth and eleventh graders from four separate English classrooms. Participants in this study have a lower-than-average comprehension, writing, or fluency level than their peers based off of state standardized (MAP) scores. Of these 26

participants, 14 have documented disabilities and obtain an IEP through the school. Participant's disabilities range from ADD, ADHD, dyslexia, autism, and specific learning disabilities in the areas of reading comprehension, written expression, fluency, and math computation. Out of all the participants, 10 were female and 16 were male. There are four African American, two Hispanic, and 20 Caucasian participants in this study.

The original total of this study was a total of 44 participants. During week one of the study, one participant had to have surgery and missed a few weeks of intervention. During week one of the study a total of three participants were absent during the intervention and were removed from the study. During week two of the study, one participant was sent home due to close contact of COVID-19 and missed the intervention for several weeks. In addition to that, three more participants were absent the day of the intervention and were removed from the study. In week three of the study four participants were absent on the day of the intervention with one being sent home due to close contact and the other being on vacation. In the fourth week of interventions, there were four participants absent from the study with one of the participants being in the hospital for mental health reasons. In the fifth week of the study there were no participants absent from the study. There were three participants absent during the sixth week of the study which caused the total number of participants to go from 44 down to 26.

Setting

The study took place in one tenth grade and three eleventh grade co-taught basic English classes in a rural Central Illinois school of approximately 6,200 residents. The school has about 1,000 students ranging from 9th to 12th grade. The student body consists of students coming from two separate towns, one more rural, the other more urban. The study takes place in four different classrooms with a range of small group to large group setting, depending on the class. The

classes have both a special education teacher and a general education teacher in the classroom, therefore making the classes co-taught. The school has one superintendent, one administrator, two assistant administrators, a nurse, six cafeteria workers, ten custodians, one speech pathologist, two social workers, five guidance counselors, two deans, eight special education teachers, and seven paraprofessionals. The racial ethnicity consists of 78% white, 9% black, 6% multi-racial, and 4% Hispanic students. Forty one percent of students attending the high school are considered to be low income. Out of every student in the school, 15% of students have IEPs. At the school there are three levels of English in the general education setting. The classes being used to conduct research is the lowest level which is considered “basic”.

Data Source and Research Materials

Through the course of this six-week study, there was one research material implemented and was used to collect a total of eight data sources. Data for this study was collected using the Connor Davidson (RISC-25) Resiliency test that was purchased by the researcher (Appendix A). A total of eight RISC-25 surveys were given to each participant to determine growth throughout this timeframe. Each survey consists of 25 statements in which the participants have to evaluate themselves on how often that statement applies to them. These 25 questions have statements that pertain to hardiness, coping, adaptability/flexibility, meaningfulness/purpose, optimism, regulation of emotion and cognition, and self-efficacy. The researcher scored each participant’s survey, calculating and recording the raw scores each week (Appendix B). Participants’ raw scores were compared to their pretest and previous week’s results to determine growth based on resiliency-based teaching strategies.

This instrument was used to collect data sources a total of eight times throughout the study. The RISC-25 was used as a pretest to collect participant’s baseline scores before

resiliency-based teaching strategies were implemented. After the intervention implemented each week that consisted of a lesson on grit and resiliency using resiliency-based teaching strategies, participants were given the RISC-25 for a self-evaluation. This occurred once a week throughout the course of six weeks. Lastly, the instrument was used to collect data as a post-test to see if participant's resiliency increased, decreased, or remained the same. The data from this source and research materials will be used to answer the question of if participants with disabilities benefit from resiliency-based teaching strategies, and if so, how does their growth compare to participants without disabilities.

Procedure of Data Collection

Participants were given the Connor-Davidson RISC-25 resiliency test as a pretest on Monday of the first week of the study. The participants then received the same Connor-Davidson RISC-25 resiliency test each week during the six-week study on Thursday after resiliency-based teaching strategies were implemented. Lastly, the participants were given the resiliency test on the Friday of the last week of the study as a post-test to determine resiliency growth in participants. The test consisted of 25 resiliency questions that had to deal with hardiness, coping, adaptability/flexibility, meaningfulness/purpose, optimism, regulation of emotions and cognition, and self-efficacy. On the day of the resiliency test, participants would rate themselves on how resilient they were feeling during that time. Each week on Thursday, the researcher implemented lessons that used resiliency-based teaching strategies.

On the first day of the study, the participants took the pretest. This was used as a baseline to get raw scores of the participant's resiliencies before any resiliency-based teachings strategies were implemented. Throughout the week participants were reading *The Autobiography of Benjamin Franklin* (Appendix C) which displayed the characteristic of resiliency. Thursday of

that same week, the participants received their first resiliency and grit lesson. The researcher compared grit to a rubber band, and how if the rubber band is stretched too thin by all the stressors, challenges, and anxiety caused by life, it would snap. However, if the rubber band had resiliency and not allow all those obstacles get in the way, it can return back to its natural state. The participants then watched a TedTalk of Angela Duckworth on grit. The participants wrote their own definition of grit and resiliency and wrote a time where they had these traits to overcome an obstacle in their lives. The participants then took the RISC-25 right after the intervention and week one data was collected.

During the second week of the study, on the Thursday intervention day, participants received a copy of Tupac Shakur's *The Rose that Grew from the Concrete* (Appendix D). Participants were told to try to find the symbolism in the story and identify what the rose and concrete might represent to Shakur. The participants then wrote out all the characteristics besides grit and resiliency that the rose might need in order to grow from the concrete. Then the participants had to think about ways that they are like the rose and what are some concrete obstacles that stand in their way. Immediately after the resiliency-based intervention the participants were asked to fill out the RISC-25 for week two data of the study.

During week three of the study, on the Thursday intervention day, participants read and discussed different learning stories that display resiliency and grit. The first story is called *A Carrot, an Egg, and a Cup of Coffee* (Appendix E). During this learning story participants are told to inference which one out of the three would be the most resilient and why, before ever hearing the story. Then the researcher read the story to them and the participants wrote the message of the story down on a piece of paper. In addition, the researcher read a story called *The Two Wolves* (Appendix F). At the end the participants discussed what each wolf represents and

how resiliency can help overcome one wolf. After the intervention is given, participants self-evaluated themselves on their resiliency by completing the RISC-25 as week three data collection.

Week four of interventions consisted of participants reading the book *The Crucible* by Arthur Miller. On the Thursday intervention, participants discuss all the obstacles that the main character, John Proctor, has to go through in order to survive the Salem Witch Trials. In addition, the class discussed how John Proctor shows he is resilient in the book by giving specific details. Participants then discussed a time when they had to deal with a major crisis in their lives and saw how their experiences connects with others in the classroom. The participants were then asked to take the RISC-25 survey to collect week four data collection.

During week five of the study, participants wrote down three to five things a day that they were grateful for during the week. On the Thursday intervention day, the researcher read a story by Dan Asmussen (Appendix G) about a father's lesson from his son. After reading the story, the participants discuss the moral of the story and what it had to do with being grateful. The participants then wrote a letter to someone in their lives that they are grateful to. After writing the letter, participants took the RISC-25 resiliency test to gain raw scores for week five of data collection.

Lastly, for the last Thursday in week six of the study, participants set short- and long-term goals for themselves. Participants then wrote a short paper as if it is twenty years from now and they are giving advice to their teenage selves. At the end of the intervention, the researcher handed out sparkling cider and each participants made a toast for change in their lives. After, participants completed the RISC-25 resiliency test for week six data collection. In addition, the

last day, Friday, participants were given the test again as a post-test score to measure growth in resiliency.

Data Analysis and Results

Data was analyzed quantitatively using descriptive analysis. Participants were chosen for this study based on placement in the researcher's 10th and 11th grade English co-taught classes. The participants all received the same intervention strategies throughout this study. Their results were compared depending on if the participant had a disability or not. Out of the 26 participants, 14 had a documented disability and 12 did not. After a six-week period of implementing resiliency-based teaching strategies, data was collected each week using the Connor-Davidson RISC-25 resiliency survey with the highest score that they could receive was 100. Each week the class was given a resiliency lesson using resiliency-based teaching strategies, which was the intervention, and immediately after participants were asked to complete the survey. Participants completed a total of eight surveys, a pretest, a post test, and a survey each week for six weeks.

Data Analysis

Each week throughout the six-week study the researcher implemented resiliency-based teaching strategies and collected data from the Connor-Davidson RISC-25 resiliency survey. These scores were analyzed quantitatively from all participants in the survey both with and without a disability. All of the data collected from the surveys were organized and reported as a raw score out of 100 using a bar graph in Microsoft Excel. The bar graph shows the raw scores of each participant throughout the six weeks including their pretest, weekly surveys, and posttest scores.

The researcher then analyzed the data collected to determine if participants with disabilities increased their resiliency based off of resiliency-based teaching strategies. It was

hypothesized that participants with disabilities would improve their resiliency when being exposed to resiliency-based teaching strategies. This was shown by using a bar graph to compare the participants with disabilities mean pretest scores to their posttest scores. If the resiliency-based teaching strategies worked, there will be an increase in average scores after the six weeks of implementation.

It was also hypothesized that participants with disabilities would see an increase in resiliency greater than or equal to participants without a disability. This data was analyzed by averaging the participants without disabilities pretest and posttest score and then comparing them to the participants with disabilities average pretest and posttest scores. This would determine if participants with disabilities showed a higher increase in resiliency than participants without a disability.

Results

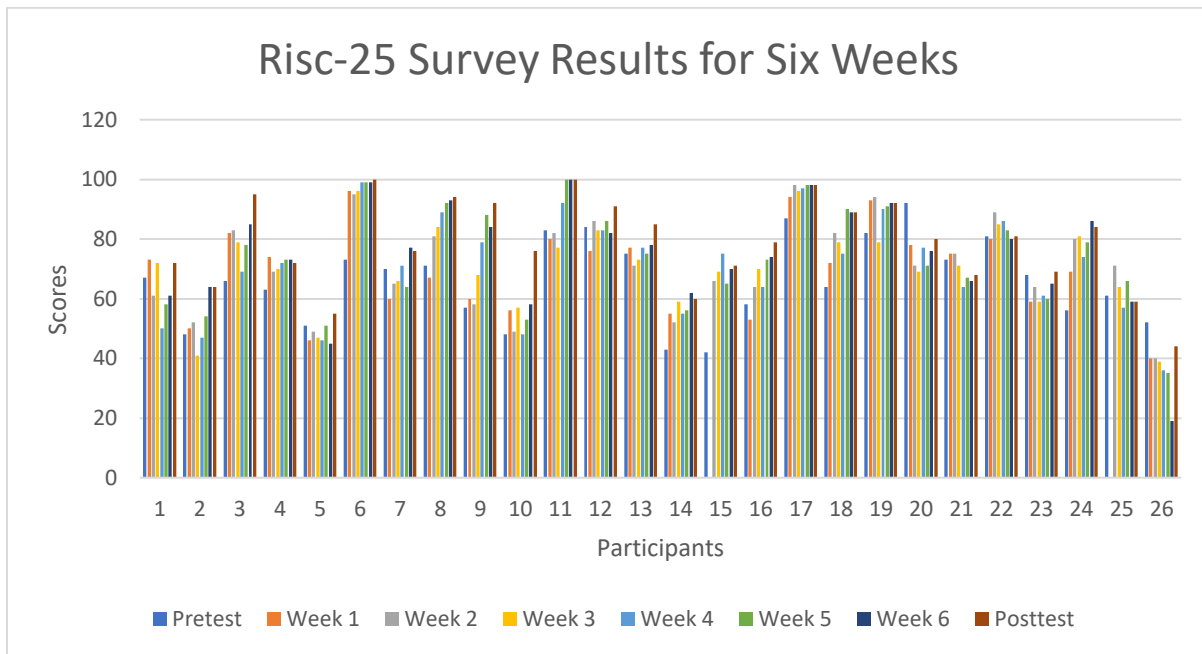
Overall results from the Connor-Davidson RISC-25 resiliency survey showed that participants with and without disabilities showed an increase in their resiliency. Out of the 26 total participants, 21 improve their resiliency score when comparing their pretest to their posttest as seen in Figure 1. This equals to around 81% of the participants showing an increase in resiliency based off resiliency-based teaching strategies. Out of the 14 participants with disabilities, 12 showed an overall increase in their raw scores when comparing their pretest to their posttest as seen in Figure 2. This means that 86% of participants with disabilities show an improvement in their resiliency levels throughout the six-week process.

Lastly, when averaging the scores of the pretest and posttest for both participants with and without disabilities, the participants with disabilities had a 14.1-point increase in scores while participants without disabilities had an 11.2-point increase as seen in Table 3. This means

that participants with disabilities improved their scores by 2.9 points when compared to participants without disabilities.

Figure 1

All participants Connor-Davidson RISC-25 Survey Results for the Six Weeks



The following section reports results of study based on two research questions: Does the use of resiliency-based teaching strategies affect resiliency in students with disabilities? and does the use of resiliency-based teaching strategies impact students differently depending on whether they have a disability or not?

Research Question One: Does the Use of resiliency-Based Teaching Strategies Affect Resiliency in Students with Disabilities?

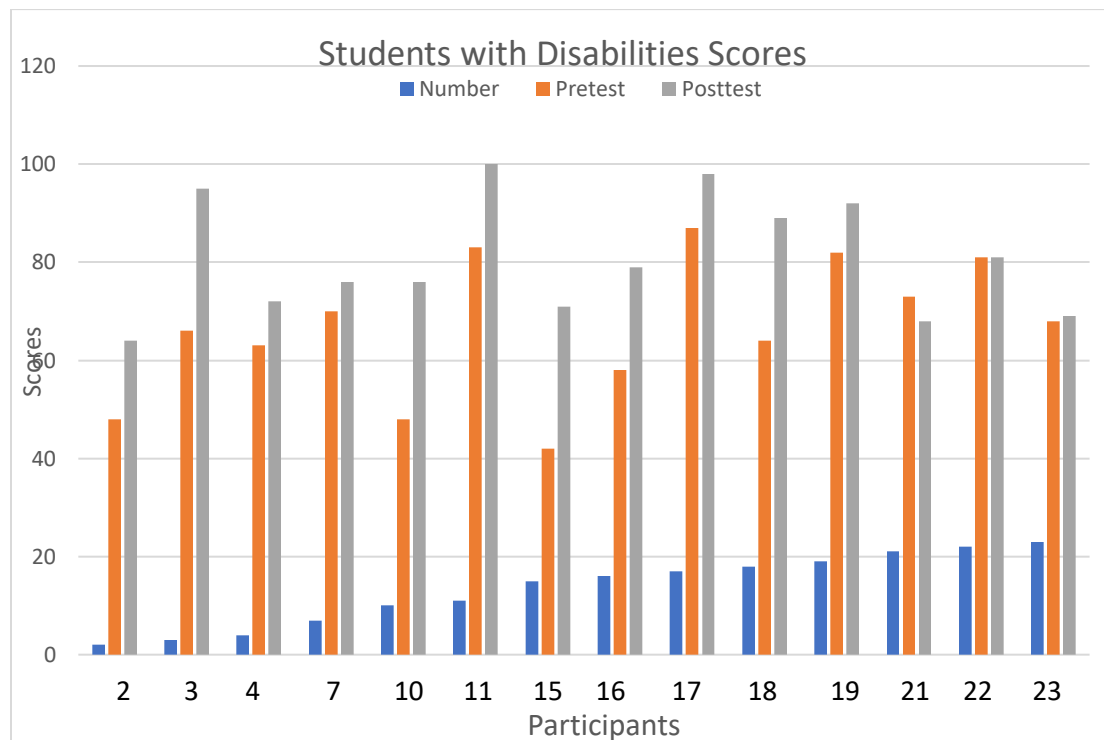
First, figure one above shows the overall raw scores of all participants in this study. This includes the pretest, weekly surveys, and posttest on all 26 participants with and without disabilities. Overall, 21 out of 26 participants, or 81 percent of participants increased their overall resiliency when comparing this pretest to their posttest. The lowest score was participant 26 who

does not have a disability with a total of 19 points during week six of interventions. The highest score was a 100 by participant number 11 for weeks five, six, and for their posttest. This participant does have a disability.

Next, Figure 2 below shows the raw scores of participants with disabilities pretest and posttest data using the RISC-25 survey. Out of the 14 participants with disabilities, 12 showed an overall increase in their raw scores when comparing their pretest to their posttest. This means 86% of participants with a disability increased their resiliency scores. Participant number 3 had the biggest increase going from a 66 to a 95. That is a 29-point difference. The highest posttest score was a 100 from participant number 11. To answer the first research question, figure 2 shows that participants with disabilities grew when given resiliency-based teaching strategies.

Figure 2

Scores of the Pretest and Posttest for Participants with Disabilities



In Table 1 shown below, it shows the scores of all participants with a disability throughout the six-week period of the study. It shows the pretest, weekly test, posttest, and overall mean of each participant. The participants with the highest overall mean score were number 17 with a score of 95.75 out of 100. The participant with the lowest score was participant number 2 with a mean of 53.1 out of 100.

In addition, it also shows the mean scores for each. The week with the highest overall scores was week 6 with a score of 77.9 out of 100 while the lowest score was week 1 and 3 with a score of 71.2 out of 100. The pretest had the lowest overall mean score with 66.6 out of 100 while the posttest had the highest overall score of 80.7 out of 100. On average, participants increased their scores by 14.1 points when comparing the pretest mean to the posttest mean.

Table 1

Participants with Disabilities' Pre-Posttests, Weekly, and Mean Scores (n=14)

Part	Pre	W1	W2	W3	W4	W5	W6	Post	Mean
2	48	50	52	41	47	54	64	64	53.14
3	66	82	83	79	69	78	85	95	70.62
4	63	74	69	70	72	73	73	72	70.75
7	70	60	65	66	71	64	77	76	68.62
10	48	56	49	57	48	53	58	76	55.62
11	83	80	82	77	92	100	100	100	89.25
15	42	51	66	69	75	65	70	71	65.42
16	58	53	64	70	64	73	74	79	66.87
17	87	94	98	96	97	98	98	98	95.75
18	64	72	82	79	75	90	89	89	80.0

19	82	93	94	79	90	91	92	92	89.12
21	73	75	75	71	64	67	66	68	69.87
22	81	80	89	85	86	83	80	81	83.12
23	68	59	64	59	61	60	65	69	63.12
Mean	66.6	71.2	73.7	71.2	72.2	74.9	77.9	80.7	

Note. Part= Participant, Pre= Pretest, W =Week, Post= Posttest

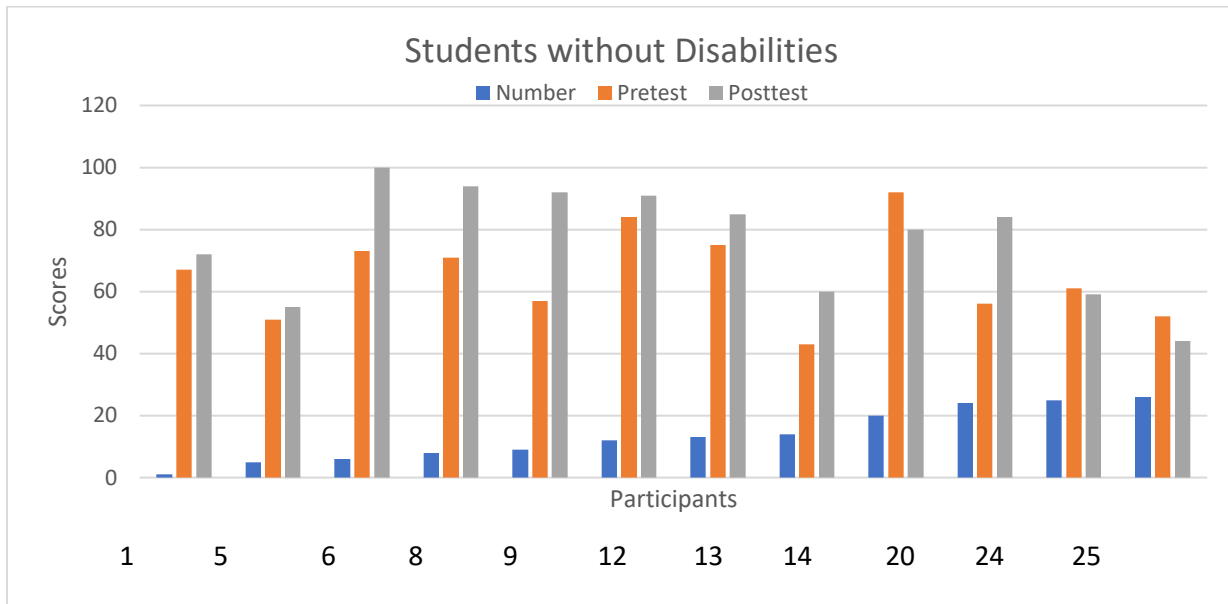
Research Question Two: Does the Use of Resiliency-Based Teaching Strategies Impact Students Differently Depending on Whether They Have a Disability or Not?

It was hypothesized that participants with disabilities would show greater than or equal to resiliency improvement when compared to participants without disabilities. According to Figures 1 and 2 along with Table 1, participants with disabilities have shown overall improvement in resiliency when given resiliency-based teaching strategies.

According to Figure 3 it shows that participants without disabilities also increased their scores when given resiliency-based teaching strategies. Nine out of the 12 participants without disabilities improve their grit scores. Which means that 75 percent of participants without disabilities increased resiliency over the six-week timeframe. Participant number nine had the highest difference in pretest to posttest scores with a difference of 35 points.

Figure 3

Scores of Pretests and Posttest for Participants Without Disabilities.



In Table 2 shown below, it shows the raw scores of all participants without a disability throughout the six-week period of the study. It shows the pretest, weekly test, posttest, and overall mean of each participant. The participants with the highest overall mean score was number 6 with a score of 94.625 out of 100. The participant with the lowest score was participant number 26 with a mean of 38.125 out of 100.

In addition, it also shows the mean for each week of the test. The week with the highest overall scores was week 5 with a score of 71.3 while the lowest score was week 4 with a mean of 68.5. The pretest had the lowest overall mean score with 65. while the posttest had the highest overall score of 76.3. On average, participants increased their scores by 11.2 points when comparing the pretest mean to the posttest mean.

Table 2

Participants without Disabilities' Scores of Pre-Posttests, Weekly, and Mean Scores (n=12)

Part	Pre	W1	W2	W3	W4	W5	W6	Post	Mean
1	67	73	61	72	50	58	61	72	64.25
5	51	46	49	47	46	51	45	55	48.75
6	73	96	95	96	99	99	99	100	94.62
8	71	67	81	84	89	92	93	94	83.85
9	57	60	58	68	79	88	84	92	73.25
12	84	76	86	83	83	86	82	91	83.87
13	75	77	71	73	77	75	78	85	76.37
14	43	55	52	59	55	56	62	60	55.25
20	92	78	71	69	77	71	76	80	76.75
24	56	69	80	81	74	79	86	84	76.12
25	61	64	71	64	57	66	59	59	62.42
26	52	40	40	39	36	35	19	44	38.12
Mean	65.1	67	67.9	69.5	68.5	71.3	70.3	76.3	

Note. Part= Participant, Pre= Pretest, W =Week, Post= Posttest

In Table 3 below, it shows the comparison of the average pretest and posttest scores between the participants with disabilities and without disabilities to see which group had more growth within the six-week study. To answer the second research question, it shows that participants with disabilities showed more growth overall than participants without disabilities. When taking the difference in pretest and posttest scores between participants with disabilities and then again with participants without disabilities it showed that participants with disabilities had a higher increase, 14.1 points, than students without disabilities, 11.2 points. The data shows that students with disabilities grew 2.9 points more on average than students without disabilities.

Table 3

Mean Pretest and Posttest Between Participants with Disabilities and Participants Without Disabilities

Mean	Part with Dis	Part without Dis	Difference Mean Score
Pre	66.60	65.10	1.50
Post	80.70	76.30	4.40
Pre-Post Difference	14.10	11.20	2.90

Note. Part = Participant, Pre = Pretest, Dis = Disability

Overall, the two research questions posed in this study were answered. When asked if resiliency-based teaching strategies affect participants with disabilities the data shows that it clearly affects them positively by giving them higher resiliency levels. In addition, when asked if the use of resiliency-based teaching strategies impact participants different depending on if they have a disability or not, the data shows that it does. While both groups increased their resiliency levels, participants with a disability showed higher improvement than participants without.

Findings, Implications, and Limitations

Findings

Based on the data collection during this study, implementing resiliency-based teaching strategies was effective in improving grit in resiliency in 10th and 11th grade participants both with and without disabilities. When looking at the group overall, 21 out of 26 participants scores improved when comparing their pretest to their posttest. This shows that 81 percent of participants overall displayed improvement in their resiliency levels. Of the 26 participants, 14 has disabilities. Twelve out of 14 participants with disabilities improved their resiliency skills, meaning that 86% increased resiliency. When comparing participants with disabilities average

difference scores between the pretest and posttest to that of the participants without disabilities, it showed that participants with disabilities grew 2.9 points higher than those without.

The purpose of this study was to determine if participants with a disability would improve their resiliency when given resiliency-based teaching strategies. The research question that drove this purpose focused on resiliency-based teaching strategies and its effects on participants with disabilities. It was hypothesized that implementing resiliency-based teaching strategies would improve resiliency in participants with documented disabilities. The study concluded that the implementation of resiliency-based teaching strategies increased participant's resiliency with 86% of participants showing increased levels of resiliency according to the RISC-25 surveys. It also showed that participants with disabilities showed an average increase in scores by 14.1-points from the pretest to the posttest.

Additionally, the second purpose of this study was to determine the effects of resiliency-based teaching strategies on both participants with and without disabilities comparatively. The research question that drove this purpose focused on whether participants with disabilities would grow as much as participants without disabilities when given resiliency-based teaching strategies. It was also hypothesized that when resiliency-based teaching strategies are implemented, participants with disabilities will show equal if not more growth than participants without disabilities. The study concluded, again, that when implementing resiliency-based teaching strategies participants with disabilities showed more growth than participants without a disability. Participants with disabilities show a 14.1-point increase from their pretest scores to their posttest scores on average. Participants without disabilities showed an 11.2-point increase from their pretest to posttest scores on average. While both groups increased their resiliency, participants with a disability improved by 2.9 more points than participants without a disability.

Discussion

The study has a total of 26 participants. Out of that 26, 14 participants had a disability and 12 did not. When given the RISC-25 resiliency survey, 12 out of the 14 participants with disabilities, or 86%, improved their resiliency after receiving resiliency-based teaching strategies for six weeks. Nine out of 12 participants without disabilities, 75%, improved their resiliency after receiving resiliency-based teaching strategies for six-weeks.

One of the research questions posed in this study was does the use of resiliency-based teaching strategies affect resiliency in students with disabilities? It was hypothesized that participants with disabilities would be affected positively from resiliency-based teaching strategies. Through the study we can see that this hypothesis is correct. As stated above, 86% of the total participants with disabilities in this study improved their resiliency. In addition, when comparing the average score of pretests to the average score of the posttest, participants with disabilities improved their score by 14.1-points.

Additionally, the other research question posed in this study was does the use of resiliency-based teaching strategies impact students differently depending on whether they have a disability or not? It was hypothesized that participants with disabilities would grow greater than or equal to that of participants without disabilities. The study has proven that this hypothesis is true. While both groups increased their overall resiliency levels, when compared the participants with disabilities grew more than those who do not. As stated previously, 86% of participants with disabilities improved while 75% of participants without disabilities improved. In addition, when comparing growth scores between the pretest and posttest, participants with disabilities grew 14.1 points while participants without disabilities grew 11.2 points. This means that

students with disabilities scored 2.9 points higher than those without disabilities, ultimately proving the hypothesis correct.

Conclusion

Overall, the purpose of this study was to determine if participants with disabilities benefited from resiliency-based teaching strategies, and if so, do they grow more, less, or the same as participants without disabilities. The study was proven to be a success by showing that indeed participants with disabilities do improve their resiliency when given resiliency-based teaching strategies. It also proved, based on comparative data, that participants with disabilities improve their resiliency more than participants without disabilities. The study answered both the research questions and proved the hypotheses correct.

Implications

Teachers are always trying to find new ways to improve their student's motivation, mindset, and resiliency when it comes to their learning. However, these non-cognitive skills are not necessarily part of the curriculum and is inadvertently taught by the teacher in anyway he/she knows how. There have been researched strategies that have been shown to improve student resiliency in the past. However, these studies only focused on mainstream students who do not have any sort of disability. It has not been proven effective on students who face the challenge of a disability.

The results of this study show that for participants in the English II and III co-taught classes used in this study, resiliency-based teaching strategies do positively impact students with and without disabilities. Although participants in this study were faced with even more of a daily challenge, that of their disability, they proved that when receiving research-based resiliency strategies in the classroom, they had a better resiliency level than before. Speculatively, this

implies that the participants both with and without disabilities were paying attention and reflecting on themselves while participating in the resiliency-based teaching strategies. When they were filling out their RISC-25 surveys, they were reflecting on themselves and how they overcome challenges, which in itself is a resiliency-based teaching strategy.

In addition, this study proved that participants with disabilities grew more than participants without disabilities. Regardless of the fact that these participants face the challenge that is their disability daily, they do not let it deter them from overcoming obstacles. The results of this study proved that all participants benefit from resiliency-based teaching strategies, however, participants with disabilities benefited from them more. This implies that participants with disabilities are more easily able to overcome obstacles due to the fact that they have to live with one every single day. The participants with disabilities scored an average of 2.9 points higher than the participants without disabilities. This is not to take away from the idea that other challenges that all participants have to go through do not affect their scores. However, the participants with a disability do not let that specific challenge get in their way. Overall, this study shows that resiliency-based teaching strategies are effective for all participants, especially those that have a disability.

Limitations

One limitation of this study was the number of absences of participants throughout the six weeks. The entire study started off with 44 participants, however after missing one of the weekly interventions and/or pretest or posttest, participants were removed from the study. This left almost half of the participants in the study left with a total of 26. While this is not a small sample to go off of, it still made the collection of data more difficult. Absences were due to many things including close contacts with someone who had COVID, the participant contracting COVID,

vacations, out of school suspensions, in school suspensions, and lack of motivation to come to school. In addition, we had other outlier absences that included hospitalizations, one for an asthma attack and another for a suicide attempt.

Another limitation was the idea that interventions were given at different times throughout the day rather than in one classroom. Because this study was done in four separate classrooms throughout the day, participants moods changed based on time. For example, participants who came to class at the end of the day after lunch might have had different results than those who got the intervention at the start of the day. In addition, the events that happen in a school day can also affect the participants scores. If participants are getting the intervention later in the day that allows more time for other things to happen that prevent them from learning such as fights, gossip, and discipline.

Reflection and Action Plan

Reflection

Using resiliency-based teaching strategies to improve participants with disabilities grit and resiliency proved to be an effective strategy to raise participant ability to overcome obstacles. Furthermore, the study also proved that participants with disabilities benefit more from resiliency-based teaching strategies than participants without disabilities. While the study showed that both groups, participants with and without disabilities, improved when given resiliency-based teaching strategies, the participants with disabilities benefited more by showing higher resiliency numbers on their RISC-25 resiliency surveys. The researcher observed that the participants with disabilities would open up more about their struggles during the intervention process than the participants without. However, as each intervention week passed, the more all participants opened up about their challenges and how it has made them stronger. It was also

noted that the overall mean score of the pretest for participants with disabilities was 1.5-points higher than participants without disabilities. Therefore, it is to be implied that students with disabilities have a little more grit and resiliency to begin with than participants without disabilities. This may be due to the daily challenges of living life with a disability, but more research needs to be done to know for sure.

Action Plan

The researcher plans on sharing this information first with the administration at the school she is employed at. The reason for this is that the school struggles with understanding social emotional learning, or anything that is non-academic or discipline related. The hope is that by showing these findings to the administration, they can better understand students with disabilities and implement ways in the classroom that can be beneficial to them and all students throughout the school. Grit and resiliency are not just about overcoming obstacles, but it is also having the skills needed to get through those obstacles. The school is seeing a lack of motivation, positive mindset, and determination in their student body. The research hopes that the administration will allow the researcher to present her finding to the school and explain the different resiliency-based teaching strategies used in the study.

Lastly, the researcher hopes that by showing this study to the administration, they will have a better understanding of students with disabilities and knowing how to help them succeed. None of the administrators are educated in the field of special education, however they oversee the department. Hopefully by sharing this research it shows that students with disabilities are more than capable of overcoming challenges and that they can be challenged in the classroom.

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Appendix A

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add up your score for each column 0 + ____ + ____ + ____ + ____

Add each of the column totals to obtain CD-RISC score = _____

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Appendix B

Wee V G

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Add up your score for each column

0 + 4 + 18 + 33 + 4

Add each of the column totals to obtain CD-RISC score

= 59

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Appendix C

Name: Class:

Excerpt from The Autobiography of Benjamin Franklin

Arriving at Perfection

By Benjamin Franklin 1791

Benjamin Franklin (1706-1790) is one of the Founding Fathers of America, known for signing the Declaration of Independence and the Constitution, as well as for his foreign service and many inventions. In this essay, he details 13 virtues that he sought to cultivate his character, including them in his autobiography. This project was grounded in Franklin's Puritan roots, as well as in the Enlightenment Era emphases on reason and self-improvement. As you read, note how different virtues interact according to Franklin.

[1] It was about this time I conceiv'd the bold and arduous¹ project of arriving at moral perfection. I wish'd to live without committing any fault at any time; I would conquer all that either natural inclination,² custom, or company might lead me into. As I knew, or thought I knew, what was right and wrong, I did not see why I might not always do the one and avoid the other. But I soon found I had undertaken a task of more difficulty than I had imagined. While my care was employ'd in guarding against one fault, I was often surprised by another; habit took the advantage of inattention; inclination was sometimes too strong for reason. I concluded, at length, that the mere speculative³ conviction⁴ that it was our interest to be completely virtuous,⁵ was not sufficient to prevent our slipping; and that the contrary habits must be broken, and good ones acquired and established, before we can have any dependence on a steady, uniform rectitude⁶ of conduct. For this purpose I therefore contriv'd⁷ the following method.

1. **Arduous (adjective)** extremely difficult
2. **Inclination (noun)** tendency
3. **Speculative (adjective)** theoretical
4. **Conviction (noun)** a firmly held belief
5. **Virtuous (adjective)** characterized by moral excellence
6. **Rectitude (noun)** moral or religious correctness
7. **Contrive (verb)** to manage



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In the various enumerations⁸ of the moral virtues I had met with in my reading, I found the catalogue more or less numerous, as different writers included more or fewer ideas under the same name. Temperance, for example, was by some confined to eating and drinking, while by others it was extended to mean the moderating of every other pleasure, appetite, inclination, or passion, bodily or mental, even to our avarice⁹ and ambition. I propos'd to myself, for the sake of clearness, to use rather more names, with fewer ideas annex'd¹⁰ to each, than a few names with more ideas; and I included under thirteen names of virtues all that at that time occur'd to me as necessary or desirable, and annexed to each a short precept,¹¹ which fully express'd the extent I gave to its meaning. These names of virtues, with their precepts, were

1. Temperance. Eat not to dullness; drink not to elevation.
2. Silence. Speak not but what may benefit others or yourself; avoid trifling¹² conversation.
3. Order. Let all your things have their places; let each part of your business have its time.
4. Resolution. Resolve to perform what you ought; perform without fail what you resolve.
5. Frugality. Make no expense but to do good to others or yourself; i.e., waste nothing.
6. Industry. Lose no time; be always employ'd in something useful; cut off all unnecessary actions.
7. Sincerity. Use no hurtful deceit; think innocently and justly, and, if you speak, speak accordingly.
8. Justice. Wrong none by doing injuries, or omitting¹³ the benefits that are your duty.
9. Moderation. Avoid extremes;¹⁴ forbear¹⁵ resenting injuries so much as you think they deserve.
10. Cleanliness. Tolerate no uncleanness in body, cloaths, or habitation.
11. Tranquility. Be not disturbed at trifles, or at accidents common or unavoidable.

12. Chastity. Rarely use venery¹⁶ but for health or offspring, never to dullness, weakness, or the injury of your own or another's peace or reputation.

13. Humility.¹⁷ Imitate Jesus and Socrates.¹⁸

8. **Enumeration (noun)** a count
9. **Avarice (noun)** extreme greed
10. **Annex (verb)** to join or add
11. **Precept (noun)** a guiding rule
12. **Trifling (adjective)** insignificant or unimportant
13. **Omit (verb)** neglect or do not include
14. Extremes
15. **Forbear (verb)** to cease or refrain
16. **Venery (noun)** the pursuit of sexual pleasure
17. **Humility (noun)** a lack of pride; humbleness
18. Socrates is a Greek philosopher known for his ethics and teaching skills.

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My intention being to acquire the Habitude of all these virtues, I judg'd it would be well not to distract my attention by attempting the whole at once, but to fix it on one of them at a time; and, when I should be master of that, then to proceed to another, and so on, till I should have gone thro' the thirteen; and, as the previous acquisition¹⁹ of some might facilitate²⁰ the acquisition of certain others, I arrang'd them with that view, as they stand above. Temperance first, as it tends to procure²¹ that coolness and clearness of head, which is so necessary where constant vigilance²² was to be kept up, and guard maintained against the unremitting²³ attraction of ancient habits, and the force of perpetual²⁴ temptations. This being acquir'd and establish'd, Silence would be more easy; and my desire being to gain knowledge at the same time that I improv'd in virtue, and considering that in conversation it was obtain'd rather by the use of the ears than of the tongue, and therefore wishing to break a habit I was getting into of prattling,²⁵ punning, and joking, which only made me acceptable to trifling company, I gave Silence the second place. This and the next, Order, I expected would allow me more time for attending to my project and my studies. Resolution, once become habitual, would keep me firm in my endeavors to obtain all the subsequent virtues; Frugality and Industry freeing me from my remaining debt, and producing affluence²⁶ and independence, would make more easy the practice of Sincerity and Justice, etc., etc. Conceiving then, that agreeably to the advice of Pythagoras in his Golden Verses,²⁷ daily examination would be necessary, I contrived the following method for conducting that examination.

I made a little book, in which I allotted a page for each of the virtues. I rul'd each page with red ink, so as to have seven columns, one for each day of the week, marking each column with a letter for the day. I cross'd these columns with thirteen red lines, marking the beginning of each line with the first letter of one of the virtues, on which line, and in its proper column, I might mark, by a little black spot, every fault I found upon examination to have been committed respecting that virtue upon that day.

[5] I determined to give a week's strict attention to each of the virtues successively. Thus, in the first week, my great guard was to avoid every the least offence against Temperance, leaving the other virtues to their ordinary chance, only marking every evening the faults of the day. Thus, if in the first week I could keep my first line, marked T, clear of spots, I suppos'd the habit of that virtue so much strengthen'd and its opposite weaken'd, that I might venture extending my attention to include the next, and for the following week keep both lines clear of spots. Proceeding thus to the last, I could go thro' a course compleat in thirteen weeks, and four courses in a year. And like him who, having a garden to weed, does not attempt to eradicate²⁸ all the bad herbs at once, which would exceed his reach and his strength, but works on one of the beds at a time, and, having accomplish'd the first, proceeds to a second, so I should have, I hoped, the encouraging

pleasure of seeing on my pages the progress I made in virtue, by clearing successively my lines of their spots, till in the end, by a number of courses. I should be happy in viewing a clean book, after a thirteen weeks' daily examination...

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19. **Acquisition (noun)** the act of gaining possession
 20. **Facilitate (verb)** to aid
 21. **Procure (verb)** bring forth or produce
 22. **Vigilance (noun)** careful attention
 23. **Unremitting (adjective)** eternal
 24. **Perpetual (adjective)** eternal
 25. Chattering
 26. **Affluence (noun)** an abundance of property or wealth
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Appendix D

The Rose That Grew From Concrete

Did you hear about the rose that grew
from a crack in the concrete?
Proving nature's law is wrong it
learned to walk with out having feet.
Funny it seems, but by keeping its dreams,
it learned to breathe fresh air.
Long live the rose that grew from concrete
when no one else ever cared.

Appendix E

A Carrot, an Egg, and a Cup of Coffee

A young woman went to her mother and told her about her life and how things were so hard for her. She did not know how she was going to make it and wanted to give up. She was tired of fighting and struggling. It seemed that as one problem was solved, a new one arose.

Her mother took her to the kitchen. She filled three pots with water and placed each on a high fire. Soon the pots came to a boil. In the first she placed carrots, in the second she placed eggs, and in the last she placed ground coffee beans. She let them sit and boil, without saying a word.

In about twenty minutes, she turned off the burners. She fished the carrots out and placed them in a bowl. She pulled the eggs out and placed them in a bowl. Then she ladled the coffee out and placed it in a bowl.

Turning to her daughter, she asked, "Tell me, what do you see?" "Carrots, eggs, and coffee," the daughter replied.

Her mother brought her closer and asked her to feel the carrots. She did and noted that they were soft. The mother then asked the daughter to take an egg and break it. After pulling off the shell, she observed the hard-boiled egg. Finally, the mother asked the daughter to sip the coffee. The daughter smiled as she tasted its rich aroma. The daughter then asked, "What does it mean, mother?"

Her mother explained that each of these objects had faced the same adversity—boiling water. Each reacted differently. The carrot went in strong, hard and unrelenting. However, after being subjected to the boiling water, it softened and became weak. The egg had been fragile. Its thin outer shell had protected its liquid interior, but after sitting through the boiling water, its inside became hardened. The ground coffee beans were unique, however. After they were in the boiling water, they had changed the water.

"Which are you?" she asked her daughter. "When adversity knocks on your door, how do you respond? Are you a carrot, an egg or a coffee bean?"

Think of this: Which am I? Am I the carrot that seems strong, but with pain and adversity do I wilt and become soft and lose my strength? Am I the egg that starts with a malleable heart, but changes with the heat? Did I have a fluid spirit, but after a death, a breakup, a financial hardship or some other trial, have I become hardened and stiff? Does my shell look the same, but on the inside am I bitter and tough with a stiff spirit and hardened heart?

Or am I like the coffee bean? The bean actually changes the hot water, the very circumstance that brings the pain. When the water gets hot, it releases the fragrance and flavor. If you are like the bean, when things are at their worst, you get better and change the situation around you. When the hour is darkest and trials are their greatest, do you elevate yourself to another level? How do you handle adversity? Are you a carrot, an egg or a coffee bean?

May you have enough happiness to make you sweet, enough trials to make you strong, enough sorrow to keep you human, and enough hope to make you happy. The happiest of people don't necessarily have the best of everything—they just make the most of everything that comes along their way. The brightest future will always be based on a forgotten past; you can't go forward in life until you let go of your past failures and heartaches.

Appendix F

An old Cherokee is teaching his grandson about life. "A fight is going on inside me," he said to the boy. "It is a terrible fight and it is between two wolves. One is evil – he is anger, envy, sorrow, regret, greed, arrogance, self-pity, guilt, resentment, inferiority, lies, false pride, superiority, and ego."

He continued, "The other is good – he is joy, peace, love, hope, serenity, humility, kindness, benevolence, empathy, generosity, truth, compassion, and faith. The same fight is going on inside you – and inside every other person, too."

The grandson thought about it for a minute and then asked his grandfather, "Which wolf will win?"

The old Cherokee simply replied, "The one you feed."

Appendix G

One day, a very wealthy father took his son on a trip to the country to show him how poor people lived. They spent several days there on a farm with a family who didn't have much to offer them.

When they returned home, the father asked his son:

"Did you like the trip?"

"Oh yes, very much, dad!"

"Did you see how poor people live?"

"Yes!" the son answered.

"So what did you learn from the trip?"

The son answered, *"I saw that we have one dog, and they had four. We have a pool that reaches to the middle of our garden, and they have a creek to swim in that has no end. We have lanterns in our garden, and they have the stars at night. Our patio reaches to the front yard, and they have the whole horizon. We have a small piece of land to live on, and they have fields that go beyond our sight. We have servants who serve us, but they serve others. We buy our food, but they grow theirs. We have walls around our property to protect us; they have friends to protect them."*

The boy's father was speechless.

The son added, *"Dad, thanks for showing me what it really means to be rich."*

What is worthless to one person is another's treasure! It's all based on perspective.

For you, what are true riches? Goods, objects, or possessions or rather, relationship with God, peace with yourself, and friendship with others?

Appendix H



Limestone
Community High School

District No. 310

4201 South Airport Road, Bartonville, Illinois 61607-2199

(309) 897-6271

August 30, 2021

Dear Institutional Review Board Members;

As principal of Limestone Community High School, I approve the appropriateness of Hailee Kaleta's project study titled *The Impacts of Resiliency Based Teaching strategies on Students with Disabilities*. Ms. Kaleta discussed the components of the study as well as the expected outcomes. The project is age-appropriate for high school students. Conducting the project at Limestone Community High School is very feasible and should be completed before the end of the semester. If you have any questions, please contact me.

Sincerely,

Charles M. Zimmerman
Limestone Community High School
Principal

Appendix I

Parent Notification

Dear Parents/Guardians:

As part of my graduate work in Curriculum and Instruction from Eastern Illinois University I am conducting my action research project in my classroom for the Fall 2021 semester. This is a requirement in order to obtain my master's degree.

I will be conducting a study that will assess student's resiliency by giving the students a resilience survey to fill out. The students in the class will continue getting instruction as normal and will be receiving the same content as the rest of the Sophomore and Junior classes. However, the students will take a resiliency pretest and a posttest after a six-week period. Within those six weeks the students will receive resiliency-based teaching strategies to see if there is any growth between the pretest and posttest.

The results gathered from this study will be used only for the purpose of this project. All the data being collected will be confidential and there will be no identifying information used in this study. Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits. As a parent or guardian, you have the option to choose to exclude your child from this study. If you choose to do so, please contact me at the email provided below.

Limestone Community High School and Mr. Zimmerman, the principal, has granted me approval to implement this action research project in my class.

If you have any questions, comments, or concerns about this project please feel free to contact me or the IRB office (information provided below) anytime.

Thank you,

Hailee Kaleta

hkaleta@limestone310.org

Institutional Review Board
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Appendix J

September 14, 2021

Hailee Kaleta
Sham Yunus
Teaching, Learning, and Foundations

Dear Hailee

Thank you for submitting the research protocol titled, "The Impact of Resiliency-based Teaching Strategies on High School Students with Disabilities" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 9/13/2021, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 21-142. You are approved to proceed with your study.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiuirb@eiu.edu

Thank you for your cooperation, and the best of success with your research.

John Bickford, Chairperson
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Jennifer Smith
Compliance Coordinator
Research and Sponsored Programs

